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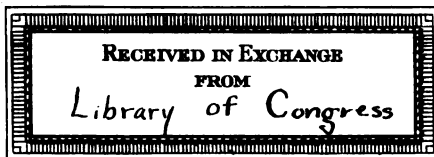
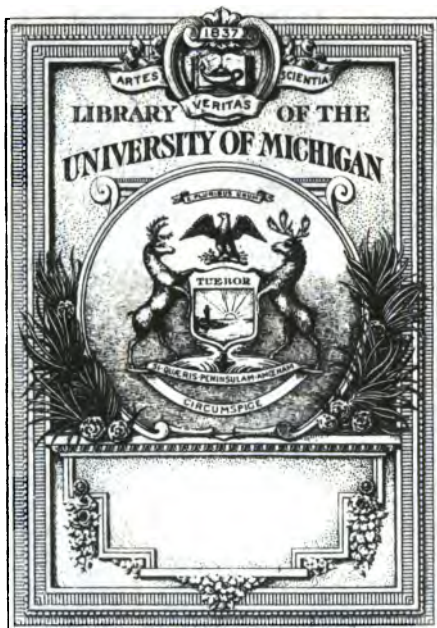
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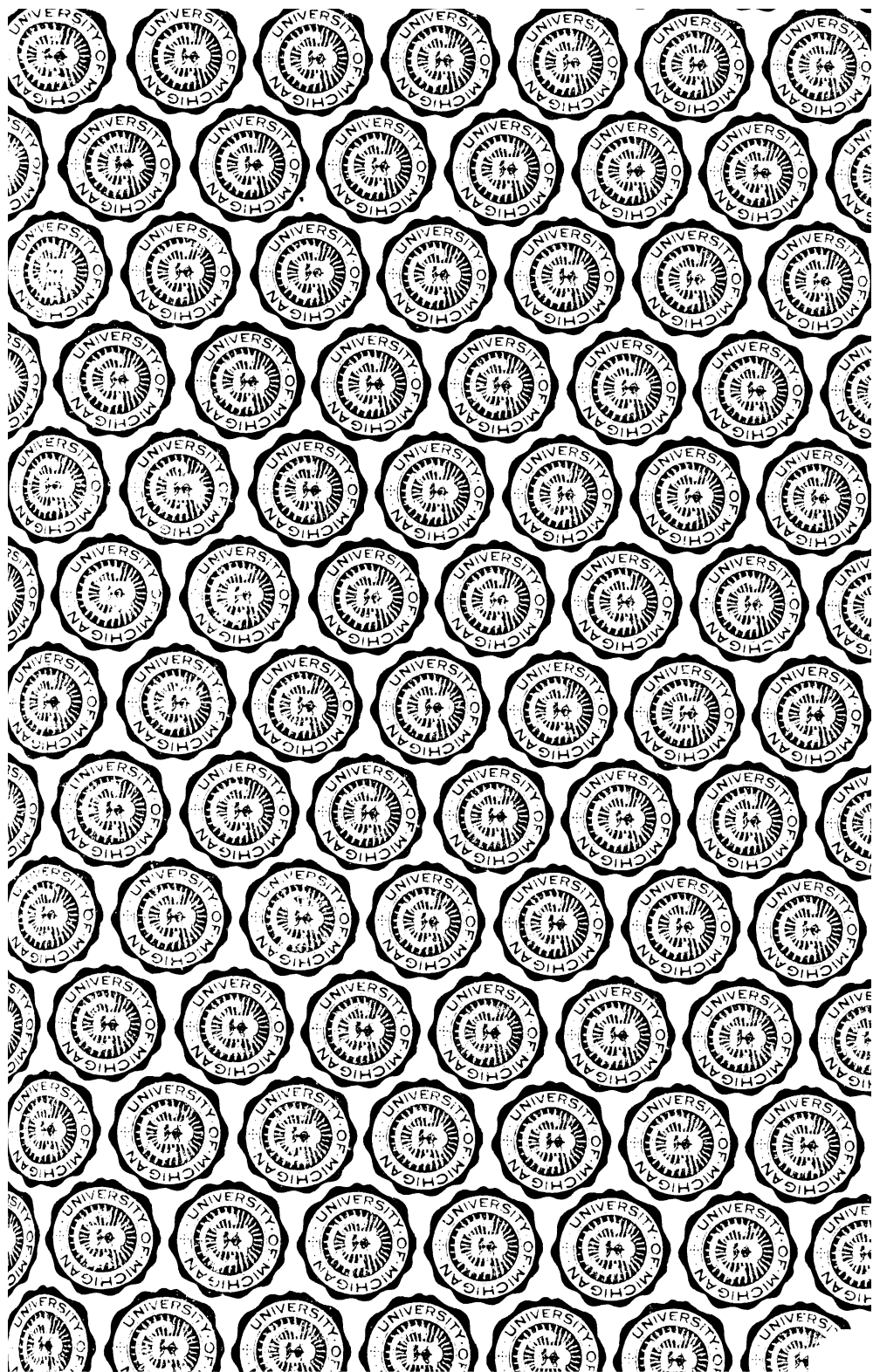
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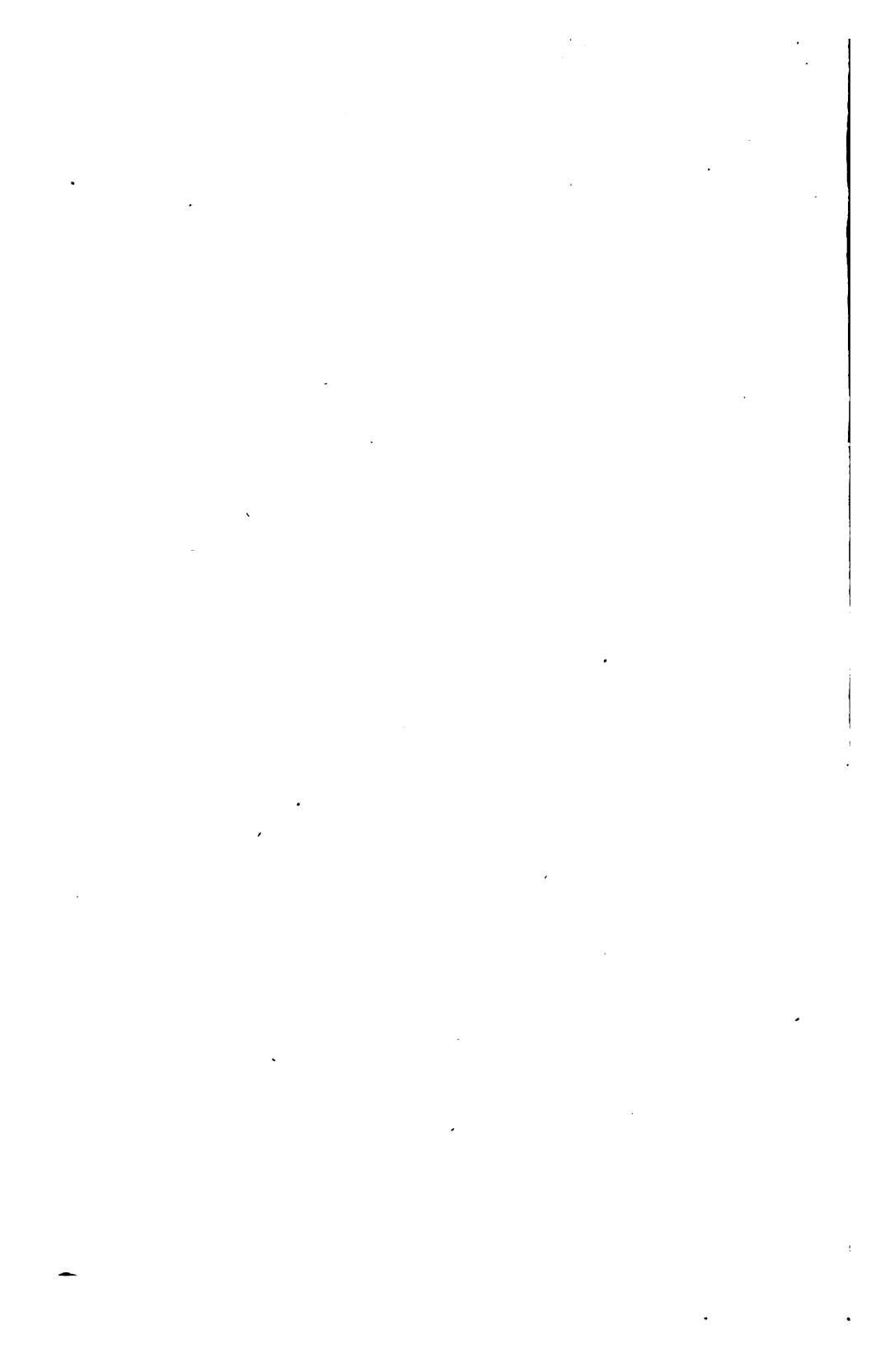
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AN ADDRESS



ON THE SUBJECT 

Atlantic and Great Western Canal,

FOR

CONNECTING THE PORTS

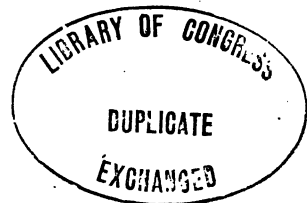
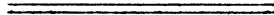
OF



SAVANNAH, BRUNSWICK, AND MOBILE

WITH THE

TENNESSEE, OHIO, AND MISSISSIPPI RIVERS.



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ADDRESS.

To his Excellency Governor JAMES M. SMITH,
Atlanta, Georgia.

SIR: In compliance with your esteemed letter inviting me to participate in the proceedings of the convention called by you to meet at Atlanta, to consider the project of constructing canals from the Tennessee river to the Coosa and Ocmulgee, and to present to that body my observations and opinion as to their feasibility,—fully impressed with the great and beneficial results that will certainly follow the construction of such national works, and to which I have given much thought and consideration,—I shall endeavor to the best of my ability to comply with your request.

When the idea of the construction of these works first occurred to me in that section of country in 1864, I anticipated that as soon as the blessings of peace would be restored to our beloved land, it would be a work worthy of the National Government, in order to open a certain and cheap means of transportation from the West direct to the Atlantic Ocean, and also the fertile and beautiful region embraced in Northern Georgia, Northern Alabama, and East Tennessee, to the industry of the farmer, miner, manufacturer, and mechanic, that the small natural barrier existing between and preventing the junction of the noble Tennessee with the Coosa should be removed, and their waters united by canals, and that these rivers would thus aid in the great work of restoring the people of our common country again into unity with each other, by an open and unobstructed highway for internal communication from the Western to the South Atlantic States and the Ocean; and

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that, though the industries of these sections were as diversified as the courses and outlets of their rivers, yet, by this junction of their waters, whose commingling would thus be symbolical of the fraternal comity which ought to exist between them for their mutual benefit and interests; and by the constant interchange of each other's products they would be united by bonds closely as one people forever, having a common interest in each other's welfare, living under one flag, and owing allegiance to one government established for the equal protection of all. When, therefore, after the restoration of peace, I arrived at the National Capital, I thought the time propitious for me to take some action to forward this desirable object, which I had kept all the time in view, and bring it to public notice, and addressed the respective Governors of Georgia and Alabama on the subject, and also submitted it to the Hon. James Harlan, Secretary of the Interior, in the following letter:

WASHINGTON CITY,
August 3, 1865.

Hon. JAMES HARLAN,
Secretary of the Interior, Washington City.

SIR: Taking into consideration the present condition of public affairs, and the necessity of opening new sources of profitable employment on national works for the laborers of the South, and thus introduce greater facilities for trade and commerce in new regions for the manufacturer, miner, and agriculturist, I beg leave to lay before you a plan for a public work, which I flatter myself with the idea would be of great public utility, and in fact a national benefit. It is this:

Steam-vessels can now navigate the waters from the Atlantic up to Rome, Georgia, and perhaps a little farther. Steamers from the Ohio can go up to Chattanooga and above in times of deep water, when they can pass the Muscle Shoals. If you will look at the map, you will perceive what a short distance it is from Chattanooga to Rome. There are also other rivers in that State which I think could be made available for slack-water navigation to the Atlantic ocean. It is not more than thirty miles, I believe, from Gunter's Landing, on the Tennessee, to Rome.

Now, I respectfully submit to you that it would be a

work becoming the age and time to unite these rivers by a canal large enough to permit the passage of steamboats from one point to the other; that is, from the Mississippi valley to the Atlantic.

There are engineer officers now here in this city who know all that locality, having lately gone over it, and they have maps ready for every foot of the way.

This idea occurred to me while on the campaign in that region of country with General Sherman's army, and I thought that I ought to submit it to some one having power to bring it forward, and I believe it comes within the province of your office.

Hoping that the matter may meet your favorable consideration, I have the honor to be, sir, your obedient servant,

JOHN A. LYNCH,

Late A. Q. M., with 15th Army Corps.

To which I received the following reply:

DEPARTMENT OF THE INTERIOR,
WASHINGTON, D. C., *August 8, 1865.*

SIR: I acknowledge the receipt of your letter of the 3d instant, on the subject of internal improvements in the State of Georgia, and have to inform you that this Department would have no jurisdiction in the matter unless Congress should by law so direct.

Very respectfully, your obedient servant,

JAMES HARLAN,
Secretary.

J. A. LYNCH, Esq.,
Washington, D. C.

Subsequently, in July, 1868, I laid the subject before the Hon. Wm. H. Seward, Secretary of State, who replied to me as follows:

DEPARTMENT OF STATE,
WASHINGTON, *July 23, 1868.*

JOHN A. LYNCH, Esq.,
Cincinnati, Ohio.

SIR: Your letter of the 18th instant has been received. Its subject seems properly to fall within the province of the Secretary of the Interior. The enterprise you suggest is worthy of consideration, though at present it may not be possible to give it the attention it deserves. I have

invited the Hon. O. H. Browning to give your communication such consideration as he may deem proper, and I am, sir, your obedient servant, WM. H. SEWARD.

And also in February, 1872, before the Hon. George E. Spencer, United States Senator from Alabama, who approved of it, and replied to me as follows:

U. S. SENATE,
WASHINGTON, *February 8, 1872.*

DEAR SIR: In reply to your favor of the 6th instant, I beg leave to assure you that it will give me pleasure to co-operate with the Georgia delegation in the matter of canals to unite or otherwise improve the navigable waters in the two States of Alabama and Georgia. I fully appreciate the benefits and importance of the enterprise; and although the times heretofore, political and otherwise, have been too unpropitious to move successfully in such matters before Congress, I am satisfied that the entire Alabama delegation would deem it a privilege to aid actively in your suggestion. Very truly, yours,

GEO. E. SPENCER.

Capt. JOHN A. LYNCH,
Washington, D. C.

In February, 1872, I transmitted to Governor E. F. Noyes, of Ohio, a full exposition of the project, in the hope that he would lay it before the Legislature of that State, and to which he returned to me the following favorable reply:

STATE OF OHIO, EXECUTIVE DEPARTMENT,
COLUMBUS, *February 24, 1872.*

JOHN A. LYNCH, Esq.,
Washington, D. C.

DEAR SIR: Governor Noyes directs me to acknowledge the receipt of your favor of the 20th instant, and in reply to inform you he deems your project as entirely practicable, and regards your suggestion as a valuable one. The communication will be transmitted to the General Assembly, which is now in session, and attention directed to the subject. Very respectfully,

JOHN B. NEIL,
Private Secretary.

Entering upon the consideration of this question, it may be necessary to examine it in the following order :

First. As to the public necessity for it and the benefits that it will confer.

Second. As to its feasibility.

I. AS A PUBLIC NECESSITY.

Trade, commerce, and manufactures are the three distinct handmaids that form a very large and important part of all the industry of this country.

And of so much magnitude and importance are they considered in connection with the development of national wealth, that all the great nations—England, France, Russia, Germany, Austria, and Italy—have departments of their governments which take cognizance of and watch over the interests of commerce and trade, and seek by every channel to promote and forward them for the benefit of the people, and the chiefs of these departments are always selected from amongst the leading minds of these nations.

Commerce consists of transportation, exchange, and distribution of commodities. The framers of our form of government had that in their consideration when they clothed it with the power to regulate commerce between this and foreign countries, and among the several States. And our domestic and foreign commerce, by navigation of the rivers, canals, seas, and railways, is one of the most productive departments of the industry of our country, and in connection with agriculture in all of its manifestations second to none. Transportation is the most important department of commerce: for transportation and navigation are necessary to the conduct of commerce.

In consideration of the great interests involved in the commerce of the inland States and the existing means for transporting the materials of that commerce, cheap transportation for the products of the interior of the country is not only a necessity, but is demanded by the highest consideration for the public weal.

To secure this great object, a direct and continuous line of water communication is imperatively needed, to connect the Mississippi river with the Atlantic sea-board.

Such means of navigation can be obtained by the construction of a canal from the Tennessee river, near Gunter'sville via Gadsden, Alabama, on the Coosa, to, Rome, Georgia, opening a continuous line of unobstructed navigation from the Ohio, Missouri, and Mississippi rivers, and all their affluents, with Mobile bay;

And by the construction of one other line of canal, from Rome, at the mouth of the Etawah, to Macon, on the Ocmulgee river, opening up another line of continuous navigation to the Atlantic ports of Brunswick and Savannah, in the State of Georgia.

The works necessary for the completion of these canals on a scale essential for the great objects have been demonstrated to be practicable and feasible of early completion, by careful examinations and surveys of the routes indicated, made by able and efficient officers of the United States Corps of Engineers.

From the national character of these works, that would be directly beneficial to at least one half of the United States and its entire population, they are entitled to receive all such national aid as is requisite to secure their completion at the earliest period possible. The necessity which is actually existing for this new outlet is owing to the increase of population along the great valleys of the Missouri and the Mississippi, and the vast production of grain, far in advance of the means for its transportation. All the routes by water and rail are constantly crowded to their fullest capacity, and either new routes must be opened or the surplus produce of the farmers' labor cannot reach a foreign market; as beyond a certain distance by the present routes the cost of transportation to market consumes the producer's profit, and leaves no inducement for him to send forward his surplus. This takes place at a very much shorter distance by railroad than by river or canal, the cost of transportation by rail being from five to

six times greater than by river, and about three times as much as by canal. Therefore, in searching for a new outlet to foreign ports for the grain produce of the great grain-growing region of the West, a water route is the only practicable or available one. And the only water outlets which the Missouri and Mississippi and lower Ohio valleys now have is the river itself, and the Erie canal and its connecting links. But from the positions of the Ohio and Tennessee rivers in relation to the rivers which flow into the Atlantic ocean other outlets can be made available by the construction of this proposed system of canals, and afford an easy solution of the question, at a comparative small expenditure, in comparison to the immense and valuable interests to be subserved, and thereby open two additional outlets, more direct than either the mouth of the Mississippi or the lakes, besides other advantages to accrue to the people of the section of country throughout the entire course of these new routes.

From the mouth of the Mississippi in the Gulf of Mexico, all along the entire length of the Atlantic coast until we arrive at New York city, a distance of about 1,500 miles, there is not one single continuous navigable water outlet for the productions of the Ohio, Missouri, and Mississippi valleys.

The necessity for one or more outlets or means of transportation, of proper capacity to accommodate the demands of such a great territory, is now admitted by almost every person who has given the subject proper consideration; and the obstacles to the construction of such lines of national highways for trade and commerce are not any greater than have heretofore been surmounted and removed in the construction of the Pennsylvania and other canals.

And from every point in which it can be viewed, it is most deserving of all the aid necessary for its construction from the nation, for it is truly a great national work, and therefore ought to be fostered as a national undertaking.

The engineers in charge of the works upon the Western rivers appreciate the importance and magnitude of the im-

provements required and the capacity of the great rivers. But Congress has not at all times appreciated the importance of such great works to the nation, the grand results to be derived, or the fact that the means required to accomplish such results must be commensurable to the greatness and value to the people of the work to be accomplished.

Now, however, thanks to the wisdom of our President, who, desirous that the whole country should prosper and flourish, and having given the subject his careful consideration, perceived the great need the people have for these open and cheap highways for sending the products of their industry to the marts of trade, and called the attention of Congress to it in his last annual message in these forcible and clear sentences:

"The attention of Congress will be called during its present session to various enterprises for the more certain and cheaper transportation of the constantly increasing surplus of Western and Southwestern products to the Atlantic sea-board. The subject is one that will force itself upon the Legislative branch of the Government sooner or later, and I suggest, therefore, that immediate steps be taken to gain all available information to insure equitable and just legislation.

"One route to connect the Mississippi valley with the Atlantic, at Charleston, South Carolina, and Savannah, Georgia, by water, by way of the Ohio and Tennessee rivers, and canals and slack-water navigation to the Savannah and Ocmulgee rivers, has been surveyed and report made by an accomplished engineer officer of the army.

"I am not prepared to recommend Government aid to these or other enterprises, until it is clearly shown that they are not only of national interest, but that when completed they will be of a value commensurate with their cost. That production increases more rapidly than the means of transportation in our country has been demonstrated by past experience. That the unprecedented growth in population and products of the whole country will require additional facilities and cheaper ones for the more bulky articles of commerce, to reach tide-water and a market, will be demanded in the near future, is equally demonstrable. * * * Looking to the great future growth

of the country and the increasing demands of commerce, it might be well, while on this subject, not only to have examined and reported upon the various practicable routes for connecting the Mississippi with tide-water on the Atlantic, but the feasibility of an almost continuous land-locked navigation from Maine to the Gulf of Mexico. Such a route along our coast would be of great value at all times, and of inestimable value in case of a foreign war. Nature has provided the greater part of this route, and the obstacles to be overcome are easily within the skill of the engineer."

In accordance with that strong recommendation Congress nominated a committee to investigate the subject, composed of gentlemen who are known for their patriotism and statesmanship, by whom no doubt the proposed lines of intercommunication will be carefully and impartially examined and fully and faithfully reported on, and to whom the subject of this line now under consideration may be confidently submitted, that it will receive all the favorable recommendation to which it is justly entitled.

The Mississippi valley is beyond question the most fertile part of our country, and is not surpassed by any other region. The climate is as good as can be found in any other in the same latitude. Its population is rapidly increasing, and its chief productions are wheat, corn, and live-stock. A large portion of these productions are taken to supply the consumption in the Eastern States, whilst some portion goes to the Southern States, the West Indies, Central and South America; but the great surplus is taken for Great Britain.

The value of a bushel of wheat at the home of the producer in this valley is about fifty cents, and to the consumer in the Eastern States one dollar and fifty cents; and the difference in these prices is paid to the carrier.

In order to reduce this great difference in the price of the first and indispensable article of food between the West and the East and to give an impetus to increased production it is necessary to lessen the expense of its transportation.

The increase in the receipts of grain from 1866 to 1869

was but twelve per cent., while the increase of population and production has been twenty-five per cent.

If the present rates of transportation cannot be reduced, it may become the interest of the Western farmer to raise no more wheat than what may be needed for the home consumption or domestic market; but to grow corn, and therewith to feed stock, and export only hogs, cattle, pork, and beef.

It is for the interest of East and West to have a diversity of interests: one as the great manufacturing interest, and the other the great agricultural. This creates a mutuality, each in its proper sphere depending on the other, and hence trade and commerce.

It is for the benefit of both that one should supply food, and the other manufactures, which they interchange, thus benefiting each region; but to render it continuous and beneficial to both, the productions of each should be carried to the place of interchange at the lowest rates that proper remuneration for the transportation will admit of; but the East cannot long afford to pay three times as much for the food as it costs where the return goods are consumed. And therefore it is the interest of the East as well as the West to lessen the cost of transportation between themselves and the West; and it is also the interest of both that the manufacturer should have a surplus of his wares to export to foreign countries, and the agriculturist a surplus of food, after supplying all the demands of the home market; for thus only can either expect to have the means wherewith to purchase from abroad all the other articles of consumption, either of food, clothing, or other articles which enter into and are incidental to the daily use of domestic economy, and which as such have become actual necessities.

The question is of great importance to all, and demands decisive attention and prompt action to remedy the evil; and the people require to have every mode of transportation which by competition will cheapen the cost of commercial intercourse between the West and the East.

The paramount commercial necessity of the country is reliable and cheap transportation, which is demanded not only by the food-producing States, to enable them to compete successfully with Russian and German cereals in foreign markets, but also by the Eastern States in securing supplies of cheap food.

Canals are of the highest importance as the great water highways of traffic, and eminently national in the economy of inland commerce, being the cheapest mode of transportation, and indispensable in regulating and preserving the equilibrium of prices in the movement of the products of the country, and therefore have been constructed by all the great commercial nations through their dominions, the results showing the wisdom of making them national works.

In this connection I refer to some of great magnitude, that verify in their results the proof of their great national utility, viz :

THE CHINESE SYSTEM.

The Chinese system of canals, which was originally conceived in great wisdom, and has existed for over one thousand years in successful operation, increasing the wealth and adding to the industry of that people, crosses the great rivers of that vast empire in a direction from north to south, combining together all the available means of internal navigation, and extending its benefits to the remotest parts of that country, and has never been surpassed by any other country. To perfect this great network of intercommunication rivers were diverted into new channels. The great canal which connects the Peiho, or River of Pekin, with the great central stream of the Yang-tse-Kiang, five hundred miles distant, is fed by a considerable river, which at the summit of the canal can be turned in either direction to feed it. This canal, with the connecting rivers, forms a communication, interrupted only by a narrow interval, extending from Pekin to Canton, a distance of one thousand miles, and the number of people employed

in or connected with this system of navigation has been estimated at five millions.

OF HOLLAND, (THE NETHERLANDS.)

As early as the 12th century canals were constructed, and every Hollander has all the benefits of these highways of trade at his very door in the Netherlands. The city of Amsterdam owes its great commercial prosperity entirely to the facilities afforded by its ship canal of fifty-one miles long, which connects the river Y by a direct channel to the German Ocean. That work was commenced in 1819 and completed in 1825, at a cost of about \$5,000,000. And its capacity is so great, that vessels of the largest size can easily pass each other.

IN ITALY.

In the 15th century canals were constructed in the Milanese or Lombard territory in Italy, and the Lombards had then a name and fame as a great commercial people.

IN GREAT BRITAIN.

Great Britain was slow in adopting them, and it was not until 1755 the first canal, which bears the projector's name, was constructed by the Duke of Bridgewater. And its success was so great, that similar works and slack-water navigation upon the rivers made use of were soon after constructed all over the country to so great an extent, that means of transportation by internal navigation are available in any part of England, and no portion of the island is at any part more than fifteen miles distant from water communication. England has about two thousand two hundred miles of canal navigation in successful operation.

And in this connection it may be remarked that the project of uniting the Atlantic and Pacific Oceans by the great ship canal across the Isthmus of Darien has been prototyped by Great Britain in the great Caledonia ship canal uniting the waters of the Irish Sea and German Ocean.

IN FRANCE.

The statesmen of France, seeing the great importance of such works, devoted their attention long since to this mode of intercommunication; and so successfully, that from the Atlantic to the Mediterranean the produce of and the imports to that country can reach the sea or be carried to the interior in every direction through means of their canal system.

It was the genius of Louis the Fourteenth that conceived the idea of connecting the waters of the Bay of Biscay with the Mediterranean—the great canal *Du Mide* of France—was projected and carried out. It is several hundred miles in length, and supplied in its upper levels from great artificial reservoirs, and is at the present day one of the most successful, useful, and productive works of the kind.

THE SUEZ CANAL.

One of the greatest undertakings of ancient or modern times was the Suez canal, not by reason of its great length, but owing to the natural obstacles to be overcome and kept in subjection from encroaching on the improvement made by man arising from the desert and the sands, the completion of which this generation witnessed; and it must be conceded now by the most determined opponent to its construction that it is not only of great practical utilitarian benefit in a commercial point of view to the human family, but that it is also a great aid to the spread of civilization, by affording, as it does, a short, easy, safe, and rapid means of communication between the nations and people of Europe and Asia, theretofore separated by fifteen thousand miles of ocean.

That great work was completed at a cost of \$80,000,000.

CANALS OF THE UNITED STATES.

The Erie canal, completed in 1825, 863 miles in length, and cost \$7,143,789, or \$19,679 per mile. The sum of \$31,834,042 16 has since been expended on its improve-

ment, enlarging its dimensions, and it is now ninety feet wide at the surface, and seven feet deep.

	Cost per mile.	Ft. wide.	Ft. deep.
The Pennsylvania Central and West Division canal.....	\$30,677		
The North Branch.....	39,203		
Lehigh, 85 miles.....	57,208	60	4
Union, 82 miles.....	57,208	36	4
Delaware and Hudson, 108 miles.....	60,200	44	6
Delaware and Raritan, 43 miles, (228 tons,).....	66,150	73	7
Chesapeake and Delaware, 184 miles.....	203,703	66	10
Chesapeake and Ohio, 191 miles, (150 tons).....	52,350	70	6
Wabash and Erie, Indiana, 379.90 miles....	33,988	60	6
Illinois and Michigan.....	84,856	60	6
Welland, Canada, (500 tons).....	194,444	71	10
St. Lawrence.....	100,000	190	10
Lachine.....	136,363	120	10

The Erie, Delaware, and Hudson canals were constructed originally to accommodate boats of too small a tonnage. The latter, with a capacity for boats of but 50 tons, transported freight at a cost of one dollar per ton for 108 miles of line. By enlarging it to a capacity for boats of 100 tons, the cost was reduced to about sixty-five cents per ton, or $\frac{58}{1000}$ mills per mile, and for boats of 136 tons to fifty cents, or to $\frac{4}{10}$ mills per ton per mile. The correctness of these figures is sustained by the results following the improvements made in 1848 in enlarging it for boats of 140 tons.

THE WELLAND AND CANADIAN CANALS.

The Canadian Parliament have wisely voted \$20,000,000 for the enlargement and improvement of the Welland canal, well knowing the important and valuable results that will flow to them from the great increase and impetus it must give to trade and commerce in the New Dominion.

IN RUSSIA.

Now if we look to Russia, the great competitor of the United States in supplying the European markets with grain, we find her rulers and ministers devoting the closest attention to, and constructing and improving the means of, internal navigation throughout that vast empire, from the

Black Sea to the Baltic and from the former to the Caspian, thus opening navigation to the heart of Central Asia, and from whence, at some day perhaps not very distant in the future, they will seek an outlet through the great rivers to the Indian Ocean.

With that Power we can have no rivalry, but we may have a generous emulation in extending the boundaries of civilization and its great adjuncts, trade and commerce. She is extending her peculiar civilization over an immense region now ruled by barbarous people, who recognize no law but might and power and self-will, and she has evidenced an entire absence of jealousy at the growing power of America, by transferring to us for a mere nominal sum all her American possessions, in itself an empire, and yet destined to be the home of industrious millions, who will draw from its now secret and hidden recesses the wealth lying dormant since the creation, awaiting only the hand of industry to bring it forth.

The astute and far-seeing statesmen of Russia who, fully aware of the great importance to their country which the possession of superabundance of food gives, encourage the cultivation of wheat and all the cereals, and let no opportunity pass by means of which that object can be best advanced. They know that the greatest aid to it is cheap transportation. In addition to the facilities afforded by their great rivers, they devote largely from the public treasury to the construction of canals in the wheat region of the Black Sea and of the Baltic, so that it can be moved from the interior of that country to Liverpool at a lower rate than from any of our Atlantic ports.

THE ENGLISH MARKET.

At present Great Britain affords the greatest market in the world for grain. Her own production of cereals has been declining even within the last three or four years, as shown by her importations. In 1871 her foreign food purchases amounted to \$303,640,000; in 1872 to \$338,185,000, an increase of \$34,540,000 in one year; and in this year

it is calculated that her imports will reach as high as \$450,000,000.

Now, of this immense demand, and which is increasing annually, it is of the greatest interest to the American farmer that he shall have facilities to supply a fair proportion.

It is supposed, after careful computation, that the annual production of the wheat crop of the United States is about 60,000,000 bushels in excess of the demand for home consumption. The principal market for this surplus has therefore to be found in Great Britain, for even in the most productive years she requires a large foreign supply in addition to her own crops; and the question to be solved with the farmer is this: how he is to have it transported there at the least expense, so as to leave to him a fair proportion of profit for its cultivation. And when there is a very productive year in Great Britain, and food is consequently cheap, the Russian supply can be landed there at lower rates than the American; wherefore in such years they engross nearly the entire market, to the exclusion of the American. The price of wheat has varied during the last ten years in England from forty shillings to eighty shillings a quarter, or from \$1 25 to \$2 50 per bushel: therefore at the former rate no American wheat can be laid down in Liverpool with the present cost of transportation.

The capacity for production in both countries is almost unlimited, and depends only upon the demands and the means of getting it delivered on the market. Our grain-producing region has been only partially developed as yet. So also in Russia. And considering that the production of wheat and its exportation, after fully supplying the home market, adds vastly to the national wealth, and therefore to the prosperity of the entire country, it ought to be a subject of the highest importance in the minds of statesmen how they can best foster and encourage this great basis of national strength, and wherein lies the prosperity of the farming interest.

By giving the producer greater facilities than he now

has for exporting his surplus produce, a wise inducement is offered for increasing agricultural pursuits—the source of all national prosperity, and bringing into cultivation millions of acres of wild land, now lying useless and unprofitable to the people as a wilderness, which would thus be made to blossom as a garden.

Our foreign trade is based chiefly upon the products of the earth, produced by the agriculturist, planter, miner, and some petroleum from the Western, Southwestern, and Southern States that are drained by the Mississippi and its tributaries. It is therefore due to these States, as also to those of the South Atlantic sea-board, that greater facilities should be had than now exist to give cheap transportation, whereby the actual producers may receive prompt returns from both the home and the foreign markets, and also that the industrious population of the Eastern States may obtain the necessities of life cheap and in abundance, thus adding considerably to the rewards of labor throughout the entire country.

It is a great question, therefore, for consideration, as to how these products shall be transported to the home market and the foreign markets at the lowest possible expense; and a question in which the consumer and the great manufacturers are as much interested, if not even more so, than the producer. It is of the first and paramount necessity to the agriculturist that he shall get his products to market at the lowest possible cost, in order that he may have some remuneration for his toil and labor over his actual and mere support. And it is of prime necessity to the Eastern mechanic and all working people there that they should obtain food at the lowest rates it can be bought for, in order to retain some of their earnings for the other necessities of life, and it thus comes home to the consideration of every Eastern manufacturer who has to compete with foreign importations.

When the agricultural interest of any country is depressed or languishes, its financial condition cannot be prosperous.

The extraordinary rapidity with which our Northwestern States have grown up and become prosperous, is due, to a great extent, to the scarcity of food in Europe, and their ability to supply that want by sending off their surplus to the foreign market, and to sell it at a price which affords them a just profit.

But what hope can the agriculturist entertain, that his labor and industry shall receive a just recompense, or inducement to extend the area of cultivation, when, owing to the combinations made by railroad and transportation companies, it costs more to send his produce to market than the article is worth to him. It has been said that corn is burned at the West for fuel, because it will not bear the cost of transportation, for the farmer cannot continue to pay the ruinous rates of railroad transportation and prosper. This is a great evil, that requires a prompt and energetic remedy, by creating new and cheap outlets for this produce, otherwise it will cause great injury to our agricultural interest; and when that interest is neglected and suffering, all other industries will be equally affected detrimentally to the entire community; for upon the prosperity of the agricultural and planting interests of this country must be based all the calculations of the capitalist for his investments, and the diversified interests of society at large, that are in every way depending upon the prosperity of this great and only true foundation for the trade and commerce of the nation. Therefore it is a question of national importance, for it concerns the whole people, that they shall be able to live cheaply and manufacture cheaply.

All wise governments have given the first and greatest consideration and encouragement to the agricultural interest, for they well knew, that in the prosperity of that prime and most necessary of all industries lies the foundation for the success of all the others. And it has been said with truth, that whoever makes two ears of corn or two blades of grass to grow upon a spot where only one grew before, does essential service to his country.

THE CHANNEL OF THE MISSISSIPPI.

The only outlet for grain and Western products, seeking a market on the Atlantic sea-board in Europe and in Central and South America, transported upon the Mississippi, is through the Balize. But by this route there are not and cannot be sufficient facilities for transferring the produce of the entire valley at reasonable rates, for all vessels in and out of the port of New Orleans have to be towed by steamers at great expense; and the delays and dangers of the navigation over the bar and through the passes from the river to the Gulf cause further expense and delay, and render shipment by this route very high. For instance, on a vessel of 800 tons capacity, carrying 26,000 bushels of wheat out of New Orleans to New York or Liverpool, the towage and port charges are but little below \$3,000, or almost eleven cents per bushel on wheat, and this of course must come out of the shipper's pocket, and ultimately out of the grower's. There are great difficulties to be overcome before shipments of Western produce can be made *via* New Orleans on such terms as will make it either profitable or desirable to use it solely as the great national highway to the markets of the world. By reason of the facilities and ease with which vessels can enter the harbors of New York and Baltimore and land their cargoes, these cities engross a monopoly of the coffee trade of the Mississippi valley, and deliver coffee at less price on the upper Mississippi than it can possibly be done through the port of New Orleans, and yet it would be but reasonable to expect that New Orleans should engross a monopoly of that trade. But vessels now anchor in the deep water of Mobile bay and Lake Borgue, and load with cotton transported by rail from New Orleans to lighters in Lake Ponchartrain, and thence to the ships, necessarily at considerable cost; but the outward-bound vessel can better afford to pay this tax than the enormous charge made for towing into and out of the harbor of New Orleans and the heavy port dues while on the berth.

But notwithstanding this, every one must feel a great interest in keeping the great river open and free to navigation, for it is a necessity to the country that it should be so; and everything that science and skill can do should be done through the National Government to aid nature in freeing the passes and mouth of the Mississippi river from all obstacles to the freest navigation. The nation could not permit any artificial obstacle to be raised to its perfect freedom of navigation at any time, and would spend thousands of millions of treasure and any number of lives to prevent it. Hence it cannot be permitted to remain closed to navigation from natural causes, that can be removed by proper appliances.

It is proposed by one of the routes embraced in this project, that is by its connection with the Coosa at Rome, to make a direct and easy connection between the Tennessee river and Mobile bay, where vessels of the largest class can anchor in one of the best harbors of the world.

THE LINE OF THE PROJECTED ROUTE.

Major McFarland, of the United States Corps of Engineers, to whom was intrusted this important survey, says, in his very able report:

"The Tennessee river is navigable at all seasons of the year by the largest class of Western-river boats from its mouth at Paducah, Kentucky, where it unites its waters with the Ohio, to Florence, Alabama, and from above the Muscle Shoals to Chattanooga, 200 miles farther. During its periodical rises the largest steamers can pass over the Muscle Shoals and up to Knoxville, 200 miles above Chattanooga. And its tributaries—the Little Tennessee, the Holston, and the French Broad—are also navigable by a smaller class of steamers. It is a beautiful river, both wide and deep, and is larger than the Ohio, and having a permanent rocky bed, it has not those obstructions—shifting bars—common to many Western rivers. Having its source in Southwestern Virginia and Western North Carolina, passing through the beautiful and fertile valleys of Eastern Tennessee, Northern Alabama, Western Tennessee and Kentucky, and by Northwestern Georgia and

Northeastern Mississippi, a region not only fertile, but exceedingly rich in valuable minerals, and capable of the highest state of cultivation, it enters the Mississippi valley when near the mouth of the Ohio, and within a few hours of some and a few days of others of the great rivers of the South west of the Mississippi—the Missouri, the Arkansas, and Red river; a safe and easy line of internal water communication between the Southeastern States, and that immense region that pays tribute to the Missouri and Mississippi, by means whereof the natural wealth of one of the richest regions of the United States in mineral and agricultural resources is being developed.

“In the vicinity of Gunter’sville the Tennessee and the Coosa rivers approach each other within thirty-five miles before turning, the one in a northwesterly and northerly direction to join the Ohio, and the other in a westerly and southerly direction to join the Alabama on its way to the Gulf of Mexico. They are there separated by Sand mountain, a span of the Cumberland range, which, after leaving the Tennessee at Chattanooga, runs for a hundred and fifty miles or more in a southwesterly direction with a gradually falling crest, which at that point is but 400 feet above low-water mark of the Tennessee at Gunter’sville, and 464 feet above low water of the Coosa at Gadsden.

“The engineer’s survey shows two practicable routes across it, one passing up the valley of Short creek, the other up the valley of Town creek; on either of which an abundant supply of water for the service of the canal can be obtained during eight months of the year, while during the remaining four months, by resorting to the use of storage reservoirs, a sufficient supply may be obtained.”

Cairo, a very short distance below the junction of the Tennessee river with the Ohio, is considered the geographical center of the Mississippi valley.

And it is, therefore, a very plain fact, that the whole central region of this country, and for two or three hundred miles north of this central line, and for a great distance below, that every thing that comes into the Mississippi river by the Missouri and its affluents will have the shortest, cheapest, and best outlet through this system of almost *all river* navigation to the Atlantic Ocean.

The saving in the cost of transportation by this line, as

compared with any railroad transportation that can be had, will be at least from forty to fifty cents per bushel, which is a profit that should enure to the producer, and increases his ability to purchase from the Eastern States manufactured and imported goods, and so trade to that extent to their own as also to the profit of the Eastern merchant.

The fact that the means of transportation between the valley of the Mississippi and the Atlantic Ocean is at present wholly inadequate for the purpose, and the cost of transportation is so heavy and burdensome as to affect in a great degree the prosperity and industry of the country, now has become a great and vital question, of great magnitude, in connection with the great industries of the people.

The Mississippi valley embraces an area of 1,200,000 square miles, of the most productive region on the face of the globe. Through the coming ages, when this vast region may contain a population of 100,000,000, whose productions will be sought not only by all other sections of this country, but by foreign nations, it must seek its egress through several channels connected with the Atlantic Ocean.

It is now an imperative necessity, lying upon the Government, to provide adequate and cheap outlets of transportation. The cost of transportation is so great, that the productions of this valley, especially its grain products, are worth, at the point of production, about one-third their value at the place of consumption; and so all the return supplies are burdened in a like manner.

By the present means of transportation there is no safe and continuous water line of communication between the Mississippi and the Atlantic sea-board. The mouths of the Mississippi are obstructed, and the obstructions need to be removed in order to obtain a clear passage for ocean vessels into or out of that river.

The water line from that river to New York, through the lakes, is made by way of the Illinois canal, which can only be used to a limited extent in certain seasons of the year, because of its imperfections; and from Lake Erie by

the great canal of New York, the way is open for a little over one half the year.

The necessity of some other water line of transportation is therefore a public want, and a necessity which must be met, to furnish a cheaper outlet than any system of railway, according to the expense of construction and working, can ever be enabled to fulfill.

This water line would connect more than ten thousand miles of free steamboat navigation with the Atlantic, of which only 365 miles would be artificial.

The line of this proposed route commences at Paducah, at the junction of the Tennessee river with the Ohio, almost central between the North and the South, and between the East and the West; the converging and diverging point of more than ten thousand miles of river navigation. From that point, by way of the Tennessee river, and the proposed canal from that river to the Coosa, near Rome, Georgia, is 253 miles, and from thence, by the navigable waters of the Coosa, the Black Warrior and Alabama rivers to Mobile bay, 700 miles.

From the Coosa, at Rome, by the proposed artificial canal, to Hawkinsville, on the Ocmulgee, near Macon, is $211\frac{1}{4}$ miles, and from thence to the port of Brunswick, Georgia, 500 miles.

The whole distance from the Ohio river, at Paducah, to Mobile being 953 miles, and to Brunswick, 964 miles.

From the Mississippi river, at the mouth of the Ohio, to the Gulf of Mexico, is 1,335 miles, and from thence to New York 1,500 miles. From Brunswick to New York is but 950 miles.

And to ascend the Mississippi river from the Ohio, and pass through the Fox and Wisconsin river improvement to the lakes, and thence by the Erie canal and Hudson river to New York, is 2,260 miles; and by the Illinois canals about 2,150 miles.

From New Orleans to Liverpool is----- 4,460 miles.

From Brunswick, Georgia, to Liverpool, is-- 3,870 “

From Savannah, Georgia, to Liverpool, is--- 3,828 “

RAILROAD CHARGES AND COMPETITION.

Railroads sometimes discriminate unjustly and extortionately against some sections and some interests in favor of others. It has been proved, for instance, that from Fort Dodge to Chicago—about 350 miles—they charge 40 cents per hundred. From Fort Dodge to Dubuque—less than half way—they charge 35 cents, and so on, in the State of Iowa, in order to force freight on to Chicago, although the producer might find a better market on the river. And this they will continue to do until there is a constant competition.

CANALS CANNOT DISCRIMINATE.

A canal is as free as the ocean to any man who has a barge or steamer, and can navigate it. A company owning many boats can have no advantage over a man owning but one; he can go on the canal, pay his tolls and go through it, and a company can do no more. The tolls would be certain and fixed, and cannot be increased or diminished to subserve any private interests or monopoly, and will be regulated by Congress, or those acting under national law. Competition will always keep down the charges for transportation, and competition of water lines, where they can be made available, will compel railroads to transport at the lowest paying rates.

The cost of carrying a ton of merchandise on the ocean is only one and a half cent a mile, on the lakes two cents, on the river two and three-quarter cents, on a canal five cents, but on a railroad twelve and a half to thirteen cents per mile. From this any one can see the great utility of the project in this respect, and how cheaply by river and canal to the gulf and to the ocean grain can be moved. By the same calculation, when corn has to be transported by rail 1,250 miles, its value is consumed by transportation, and wheat will be so heavily taxed that investments in it become hazardous.

Our Atlantic sea-board consists of 3,500 miles, and inland navigation, counting the shores and tributaries, of

30,000 miles. Upon these waters floats a commerce three times greater than the entire foreign commerce of the country.

In 1860 the entire product of the United States was \$1,900,000,000. Its exports were \$373,189,000, being less than one-fifth, leaving four-fifths for exchange between the States.

The Mississippi river drains 1,785,000 square miles of territory. And the States formed there, notwithstanding all their wealth in cereal products, do not take more than one-fifth of this vast domain under cultivation.

Professor Waterhouse estimates the annual commerce of the Mississippi river at \$2,000,000,000, nearly half of which is derived from eight or ten Western States.

The Agricultural Bureau, basing its calculation on past results, estimates the cereal products of the West for the present year at 762,000,000 bushels.

The proposed canal to the Coosa river, besides serving as a link in the chain, will open direct communication between the valley of the Tennessee and the rich cotton and mineral regions of Central and Northern Alabama, and furnish a short and easy water-route from Eastern Tennessee and Northern Georgia and Alabama to Mobile and the Gulf of Mexico, a distance of 700 miles, on which navigation is good at all seasons.

In order to ascertain and show what facilities for transportation this canal will afford, it may be remarked that one steam-tug can tow five barges, each barge of 112 by 28 feet, with a capacity for carrying 10,000 bushels of wheat, or 300 tons of freight, and drawing from four to four and a half feet of water, can pass from St. Paul or St. Louis to Paducah at the rate of ten miles an hour, and from thence up the Tennessee to the canal at the rate of five miles or more; and returning, reverse the rate. During the season of low water, when they can be loaded down to only three feet, their carrying capacity will be 170 tons, or about 5,600 bushels of grain.

All the States west of the Mississippi, including Mis-

souri and Iowa, and those States immediately west of the Missouri, as well as the southern portions of Illinois, Indiana, Ohio, and Kentucky, would derive actual and continuous benefit from the proposed route through all seasons of the year, for it would have this advantage over the northern route, that it would never be obstructed by ice during the winter; and also over the route by the Mississippi river, that its exports would not be delayed during very dry seasons, when low water prevails at the mouth of the Mississippi river, and when for periods of weeks, running into months, sea-going vessels of large tonnage cannot get over the bars either in or out of that river; and over the Southern or Gulf route it would also have the advantage of reaching a port, either Brunswick or Savannah, convenient and easy of access to the ocean for large vessels, always free from obstructions of every kind; greatly in distance, and therefore in time; avoiding heavy rates of insurance, port charges, tonnage, and also in passing through a climate more friendly to the transportation of farming products during the warm months, and especially of grain in bulk.

The barges or boats on their return trips will always find cargoes of freight peculiar to that part of the South Atlantic, and in demand for the Western market, besides a great variety of minerals and ores to be carried from the mines on the banks of the Tennessee, Coosa, and Ocmulgee to the furnaces on the Ohio river.

If this work is to be undertaken through aid rendered by the National Government, there cannot be any doubt of the security it would afford for repayment of whatever loan the Government would make, paying the principal at maturity, say within twenty years after the issuing of the bonds.

In arriving at this conclusion, it is not depending on mere conjecture. The history of the Erie canal, and a close computation of the circumstances connected with the operation of that work and of the enterprise which is now

under consideration, furnish sufficient grounds upon which to base such reasonable conclusions.

The entire cost of the Erie canal, from its commencement up to the 30th September, 1862, was \$38,977,831 16, which, with interest up to that date, amounted to \$52,491,915 74, and after deducting expenses, (\$12,518,860 03,) there remained a net profit of \$59,264,810 62, not only sufficient up to that date to pay the entire cost of construction, with interest, but leaving a surplus of nearly seven millions of dollars for the State of its gross earnings. It appears that but little more than one-sixth was required to meet expenses, repairs, &c., while the balance, or five-sixths, was net gain. And this includes not only the period after its enlargement, but before, and then the canal was in an unfinished condition, and the cost of repairs much greater and the receipts less. Since the 30th of September, 1862, the net earnings were about twenty millions more.

No other improvement, by railroad or otherwise, can make such an exhibit. This great work has not only paid for its construction out of its tolls, but makes itself a present to the State, with about \$27,000,000 of net profit.

And yet it had to struggle in its inception against adverse circumstances. Its friends and advocates had to meet the sneers and sarcasms of men who, "with too much pride to study, and too much wit to think, were ready to undervalue what they did not understand or could not comprehend, and therefore condemn it. And so it is with all undertakings of great national importance and magnitude.

The country which, it must be conceded, will be always tributary to this line—even when the Lake and Erie canal routes and the Mississippi river are available, and the immense amount of freight which will seek an outlet here when those other routes are closed, with a capacity more than double the Erie canal, by reason of its entire freedom from obstruction during the whole year, and the almost limitless amount of every species of heavy freight to be transported over it, both East and West—cannot be less

than equal to a through tonnage of ten millions per annum. The tolls on this amount, at two and one half mills per ton per mile—which is but a little over half of that on the Erie canal, which has been about $4\frac{1}{10}$ mills—on this amount for three hundred and seven miles will aggregate \$7,674,000 per annum; deducting one sixth of that amount for expenses, will leave \$6,395,835 of net income.

Now, if a loan of bonds be made to the amount of, say, \$36,000,000, the gold interest on that at six per cent., even with a premium of thirty-five per cent., will amount to \$2,916,000. Thus the income will meet and leave a surplus of over \$3,000,000, applicable to the repayment of the cost of construction. By advancing the bonds as may be required every six months, the interest which will accumulate up to the time of completion will not at the very greatest reach \$6,000,000 to be advanced during a period of four years, allowing that time for the completion of the entire work. And this is every cent the Government will, upon every reasonable calculation, ever be called upon to advance.

The cost of transporting a bushel of wheat from the Mississippi river to New York by railroad exceeds seventy-five cents per bushel when the canals are closed; and by way of the Illinois canal to Chicago, and thence again by water navigation, owing to connections made by the carriers, generally to sixty-two cents per bushel.

According to the official report of the engineers of the State of New York, the relative cost of transportation over the Erie canal for the years 1866, 1867, and 1868, was one cent a ton per mile, of which about one-half is tolls—the actual cost, four and a half mills; and the cost over the railroads competing with the canal is two and four-tenth cents; twenty-four mills against ten mills, the cost of transportation over the canals, almost one-half of it tolls, putting into the State treasury about four millions of dollars per year.

This other fact also appears in that report, viz: That the cost of railroad transportation through a period of

thirteen years has been two and a half times greater than the cost of transportation by canals.

If there were not any larger amount of tolls collected from these canals than what is required to pay the cost of operating and keeping them in repair, then the tolls might be reduced to below half a mill a ton a mile, and the entire cost of transportation over the water-line would not exceed five mills a ton a mile. This report also shows, that as the capacity of canals is increased, the rate at which they can transport is diminished, and that by the aid of steam the cost of transportation over the Erie canal will be but a fraction over three mills a ton a mile.

Steam-tugs have passed down the Mississippi river with 155,000 bushels of wheat in tow in barges. That would freight thirty trains of one hundred and fifty tons each.

Mr. McAlpin, who has the reputation of being one of the ablest engineers in this or any other country, has said :

With many persons there is an idea that the railway has superseded the canal, and that the former now performs the chief part of the traffic of the country. While the latter is true in regard to interior short lines of trade, it is a serious error in reference to the great transport between the agricultural West and the Atlantic. The Erie canal, during its short season of navigation, conveys more of this traffic than all the railroads together—*more than all the trunk lines from the St. Lawrence to the Potomac*. The boats which come to tide-water have an average cargo exceeding that carried by the longest freight train on the Central railway.

And it is to be borne in mind that the Erie canal is open for navigation, at most, *only seven* months in the year, and for the first four and a half months there is no large amount of freight going forward. It is during the latter half of the month of September and in October and November, that more than half the freight passes through the Erie canal. The boats are idle for about five months, and of course during the few months in which they have an abundance of freight, they must charge more than they would if they were employed to their full capacity the

entire twelve months. In the spring, when the canal opens about the first of May, the produce of the West has almost all reached its markets over the railroads, at much higher rates, and the merchandise has got back to the West, and they carry less freight than they are able to carry until late in September. That would not be the case with the Tennessee and Georgia canal, for that canal need not be closed for twenty days during an entire year, and freight ought to be carried over it at all seasons at not a greater expense than five mills a ton per mile.

The tonnage of the Erie canal in 1868 was 6,442,225.

The average cost of transportation of wheat from Chicago to New York for the last ten years has been about 30 cents per bushel.

The average cost of transportation from two points on the lake line—Buffalo and Erie—to New York for the last 10 years has been, for wheat, at about the ratio of 30 cents a bushel.

The railroads carry wheat from the interior of Iowa to the Mississippi river for five cents a ton per mile, being ten times as much as it has been carried for by river and canal. And the charge by rail from the Mississippi river to Chicago a little over three cents per mile, being six times as much as it costs to send it by the water route.

The people of the West and Southwest do not object to railroads, but, on the contrary, do all they can to aid and assist in their construction, for they know well, and fully appreciate, all the benefits which are derived from their construction. They have their duties to perform in the transportation of the lighter and more costly goods, while the canal transports the heavy freights and bulky merchandise.

II. ITS FEASIBILITY.

THE ESTIMATED COST OF THE WORK.

According to the estimates made by the able and accomplished engineer officer, Major McFarland, to whom was assigned the important duties of the survey of the Tennes-

see and Georgia canal, and who, in his searching and thorough report, enters into the minutest details, I find the probable cost to be as follows:

For canal from Gunter'sville, on the Tennessee river, to Gadsden, Alabama, distance, $50\frac{1}{2}$ miles—33 miles of canal and $17\frac{1}{2}$ slack-water.

Canal and slack-water and feeder at----- \$9,518,415

Storage reservoirs----- 2,052,192

\$11,570,607

FOR IMPROVEMENT OF THE COOSA RIVER.

Extending from the mouth of Will's creek, $2\frac{1}{2}$ miles below Gadsden, on the Coosa, up that river to Rome, Georgia, at the junction of the Etowah and Oostenaula, a distance of $153\frac{1}{2}$ miles----- \$100,000

THE GEORGIA DIVISION.

From Rome, Georgia, at the mouth of the Etowah, up that river to a point a short distance above Cartersville; thence across the country to Macon, on the Ocmulgee river, distance $211\frac{1}{2}$ miles----- 20,435,684

THE ALTAMAHA DIVISION.

From Macon, on the Ocmulgee, down that river and the Altamaha, into which it empties, to Darien, Georgia, a distance of 500 miles, with a branch either to Savannah or to Brunswick, Georgia—extension of canal from Macon to Hawkinsville; 45 miles, at \$50,000 per mile----- 2,250,000

For the necessary improvements of the remaining 400 miles of river navigation on the Ocmulgee, from Hawkinsville to Darien----- 250,000

Total cost of this section----- \$2,500,000

From Darien to Brunswick is twenty miles.

From Darien to Savannah, inside the sea islands, one hundred and fifty miles.

Altamaha Division to Brunswick, say twenty miles, \$1,000,000.

RECAPITULATION.

Estimated cost of opening a line of water communication from Guntersville, on the Tennessee river, to Brunswick, Georgia, on the Atlantic coast, suitable for the passage of barges carrying 170 tons of freight during the low-water season, and of 300 tons during the ordinary stages of water:

Canal and slack-water, 50½ miles-----	\$11,570,607
Improvement of Coosa river-----	100,000
For canal of the Georgia Division from Cartersville, above Rome, to Hawkinsville, on the Ocmulgee river, 256½ miles, 45 miles below Macon-----	22,683,684
	<hr/>
	\$34,354,291

The other improvements recommended by the engineer officer, in my opinion, are merely incidental to, but not exclusively called for by reason of the construction of the proposed canals, and although they would to a great extent be aids to canal navigation, they are also such as properly come within the intention and object of the annual appropriations made by Congress for the improvement of rivers and harbors. As the improvements suggested are for rivers at present partly navigable, and therefore already national highways, the proposed expenses of improving their channels for their safer and better navigation ought not to be charged as against the canal project, but merely as accessory help thereto, and not to be estimated or considered or included as a public outlay called forth exclusively by reason of the construction of these canals.

The actual cost of the canals from the Tennessee river to

the Coosa, and from the Coosa to the Ocmulgee, a total length of $306\frac{1}{2}$ miles, is therefore about \$111,584 $\frac{3}{87}$ per mile, amounting to \$34,256,341.

This estimate is very little more than the cost per mile of the Erie canal enlarged; and taking St. Louis as the great grain mart for the point of departure, the distance to the Atlantic shipping port of Brunswick, Georgia, is 1,508 miles, strict measurement, 365 of which consist of the projected canal and slack-water navigation connected, and 1,143 miles of river navigation.

From St. Louis to New York, by way of the Illinois and Michigan and Erie canals, is 1,919 miles; by way of Portsmouth, Ohio, and the Erie canals, it is 1,638 miles.

The difference in favor of the Brunswick route to a port is 305 miles, about one-sixth of the whole distance to New York, and the saving in distance being entirely by river, on which the actual cost of transporting freight is about 3 mills per ton per mile, the saving of cost from this cause alone equals $91\frac{1}{2}$ cents per ton. Three transfers of cargo are also saved, which amount to 30 cents a ton more; and as the Ohio route includes about 300 miles more of canal than the Brunswick route, over which the difference of cost of transportation is not less than 2 mills per ton per mile—sixty cents—the total saving in cost by the Brunswick route is \$1 $81\frac{1}{2}$ per ton, or about $5\frac{1}{2}$ cents per bushel.

As an avenue for the cheap transmission and distribution of the cereals and other products of the West, the proposed improvement of the navigation of the Tennessee river, in connection with the canal, cannot be surpassed by any other route.

Through a combination of physical circumstances, it presents geographical and commercial advantages eminently conducive to the prosperity and wealth of the whole country, so as to make it a national question.

It will form a new, additional, and material part of a grand system of continuous water transit from the headwaters of the Monongahela and Allegheny rivers to Mo-

bile, on the Gulf of Mexico, and also to the harbor of Altamaha Sound, on the Atlantic Ocean.

It will directly influence the industries of seventeen States, and also circulate the commodities of every State in the Union, and it will be a national highway, under the protection of national law. It will promote national interests by aiding commerce, facilitating intercourse, and developing the resources of the nation in every branch of industry.

The Ohio river, an adjunct to the Tennessee in this great link, is valuable as passing through a region teeming with abundance; but it has no navigable outlet in the direction in which that produce is attracted by the demands of the markets. By this proposed canal from the Tennessee, what a vast commerce will be opened thenceforward to the steamboat interest of that river.

The committee of the House of Representatives, to whom the bill was referred for the construction and improvement of interior lines of navigation, in their report submitted at the last session of Congress say:

Cheap transportation, to augment and facilitate the commerce of the nation, is a pressing necessity at this time, and all the industrial and producing classes of the country are demanding, at the hands of the Government, a wise, liberal, and comprehensive policy in improving, constructing, and aiding the natural and artificial channels of water communication between the interior of the continent and the sea-board, for the purpose of lessening the cost of transportation of the stores of minerals, produce, and merchandise between the various sections of the Union and with foreign countries.

Resolved, That the proposed works should be looked to with profound attention by Congress; that the mode of construction and improvement should be in accordance with plans and specifications approved by competent engineers of the Government of the United States, but its accomplishment ought to be secured by judicious legislation.

The question involved is one of very great importance. It is no less than whether we, as a whole nation and people, shall continue to expand and increase in population, pros-

perity, and wealth, or whether, by a parsimonious policy, we shall hamper, cripple, and blight one of the most important industries of the whole country, indeed, the one upon which all others are dependent, to wit: its agricultural interest. It needs no argument to prove that upon the development and prosperity of this industry depend the prosperity and development of all others, and therefore we shall offer none.

Careful observers of the signs of the times have for years predicted that the time would soon come when this question of greater facilities and cheaper rates of intercommunication between the different portions and sections of the country, than have hitherto been enjoyed by the people, would come before Congress for solution, with an array of facts, a power of argument, and force of popular demonstration and demand that could no longer be turned aside or disregarded. In the opinion of your committee that time has arrived. From all portions of the country this popular voice is coming up to this Capitol, imploring and demanding assistance in this behalf. So general and so urgent is this appeal, that we are justified in the belief that the people of the whole country, without distinction of party, local prejudices and preferences, or any other consideration whatever, are a unit upon this one question. That voice came earlier from the great agricultural States of the Northwest than from any other portion of the country, because the products of their industry, being heavy and bulky, and entirely raw material, could not incur the heavy charges for transportation to market imposed upon them, and because that section did not then, and does not now, enjoy the advantages of uninterrupted and cheap means of transit existing in other portions of the country.

The rapid settlement and consequent development of the country west of the lakes soon demonstrated the necessity for increased means and greater facilities for the transportation and market of the products of those regions. This will be more apparent and important if we examine a few of the products of the agricultural States clustering around the Northern lakes or lying contiguous thereto, to wit: Ohio, Kentucky; Indiana, Illinois, Missouri, Kansas, Nebraska, Dakota Territory, Iowa, Minnesota, Wisconsin, Michigan. We shall confine our examination to the six principal staples of those States, to wit: wheat, corn, hogs, cattle, sheep, and wool, together with the aggregated

values thereof, and also the probable increase of each in the year 1880.

Estimate of aggregate products and value of said States for the year 1872, based upon the reports of the Agricultural Bureau :

Wheat, 225,844,800 bushels, at 50 cents per bushel-----	\$112,922,400
Corn, 1,021,937,476 bushels, at 25 cents per bushel-----	255,484,369
Hogs, 22,660,040 head, at \$5 each-----	113,300,200
Cattle, 13,362,492 head, at \$10 each-----	133,624,920
Sheep, 35,146,407 head, at \$1 50 each-----	52,719,610
Wool, 70,292,814 pounds, at 40 cents per pound-----	28,117,125
Aggregate value-----	<u><u>\$706,168,624</u></u>

Estimate of aggregate products thereof in 1880, at ten per cent. increase per annum :

Wheat, 484,794,850 bushels, at 50 cents per bushel-----	\$242,397,425
Corn, 2,892,329,851 bushels, at 25 cents per bushel-----	723,082,463
Hogs, 46,894,113 head, at \$5 each-----	234,470,565
Cattle, 38,912,764 head, at \$10 each-----	389,127,640
Sheep, 74,149,492 head, at \$1 50 each-----	111,224,238
Wool, 110,450,787 pounds, at 40 cents per pound-----	44,180,314
Total aggregate value-----	<u><u>\$1,744,482,645</u></u>

These last estimates are based upon the hypothesis that remunerative markets can be secured for those products. If that cannot be done, there will probably be no material falling off in any of them, and possibly a small increase; but even now there is a perceptible diminution of production as compared with the increase of population.

From this brief summary of the present and prospective agricultural products of these twelve States, which consti-

tute the main staple thereof, either as food or clothing; three very important considerations press themselves with great force upon the attention of Congress and the country, to wit:

1. That the manufacturing and commercial portions of the country must, in a very great measure, (perhaps we should say entirely,) depend upon them for their food supplies, and to a very great extent for the raw material to supply their manufactories as well.

2. The cheap transportation to market of those products is most imperatively demanded, without which increase of production as well as of population and wealth must at no distant day reach a limit beyond which they cannot pass.

3. "That the country does not now possess those means and facilities of cheap transportation, and never can possess them under the present system of transit: because they, in fact, amount to but one system, and therefore there neither is nor can be competition.

"These propositions will not be controverted. The inquiry then arises, How can the country secure that competition, and therefore cheap rates of transit? Obviously only by creating another system, entirely distinct from and independent of the present. This must, indeed can only, be secured by the improvement of the great water channels of the continent."

It hardly needs an argument to prove that if the farmers of the West can sell their surplus products at remunerative prices, just in the same proportion will there be created markets for the manufactures of the Eastern and Middle States. And this, without demanding the sacrifice or abandonment of any other of the material interests of the country. It is not so much a high tariff as the want of a market which depresses and is destroying the great agricultural interests of the West. For if the manufacturers are broken down, the market which the farmer has now is destroyed. Vast numbers of the people of that region are actually suffering because they cannot exchange their abundant crops for those necessary articles which, besides mere food, are every day wants for the household. If any one inquires what is the remedy for this condition, the reply has come from the Legislatures of fifteen States, rep-

resenting more than twenty millions of people—from all those great agricultural States of the West; from every city, town, and commercial center throughout the entire region;—cheap transportation.

In view of the vast importance of this question, and the urgent necessity that speedy relief should be extended to the great agricultural, manufacturing, mineral, mechanical, and commercial interests of the country, the committee recommend to the attention of Congress the importance and necessity of the enactment of proper provisions to accomplish this great national object.

The question of adequate and cheap transportation, according to the present necessities of trade and commerce, is the great question of the day with the people.

The right of way is the right of the million. Under the common law, when the person of the King was held as sacred, it was denominated the "King's Highway," as a term of such import, that no man dared to offer another any impediment to the most perfect free use thereof. The sovereign then, as it were, held it in trust, and exercised his jurisdiction over it only for the public weal. The first necessity for profitable agricultural pursuits are numerous and good roads. Our Western rivers are great highways of the people, and it is the duty of the State—that is, the National Government—to keep them free, accessible, and open to all, and not only the main arteries themselves, but all their tributaries and their necessary connections, such as canals.

Let the subject be examined in the light of the evidence of facts gathered from the results of similar enterprises. In September, 1866, the Erie and Champlain canals, which were the two great works that brought trade into and through the State of New York, had paid for the cost of their construction, the cost of repairs, the operating expenses, the cost of reconstruction, with interest at seven per cent., and added to the Treasury of the State of New York the sum of thirty-eight millions of dollars, as exhibit.

ited by the report for 1868, and now produces to the State four millions per annum.

When these projected canals from the Tennessee to the Coosa and Ocmulgee have paid for their construction, it is not expected that any profits shall be derived from them, but that the people shall have the benefit of the reduced rates that then can be afforded for the transportation of their products.

The question may of course be asked, Will the canal return any profit? And to that inquiry reply may be made, that there will be constant employment on it all through the year, for it never will be frozen; and from the mouth of the Ohio to Dubuque the navigation of the Mississippi river is open upon an average twelve weeks in a year when the Erie canal is closed. When this canal is completed, the produce of the West will not be at the mercy of any other canal or railroad at any season of the year. It is for Congress to say what the tolls shall be until the debt is paid, and when paid then the canal to be free.

This work is demanded by every consideration of public policy, of patriotism, and of statesmanship.

The National Government has wisely lent its aid amongst others to construct three great lines of railroad to the Pacific coast; and when they shall be completed, they will be found overburdened by the traffic, that will grow with their growth and extend with their connections. But the great and magnificent rivers of the West are never overburdened, they are nature's arteries, formed at the creation to relieve the ever fructifying earth of her superfluous wealth of production, completed to aid civilized man in carrying forward the command of his Creator to subdue the earth. All they need from man is very little continuous care to free them from obstructions, and all expenditures made for this object repay more than fifty-fold, as evidenced by even the small amount of money from the National Treasury expended on the Missouri river.

The people of the West feel that they have a right to demand this river improvement and canal connection, for by

this route a bushel of wheat can be brought from Omaha or St. Paul to Brunswick or Savannah for less than 25 cents per bushel.

Is it not the duty of the Government, in the interest of the people which it represents, to unite by these short canals the two great systems of natural water navigation of the West and Southwest, separated only by the comparatively small distance of 306 miles, as it was deemed beneficial to do so in the case of the Saut St. Marie canal, opening and uniting the great lakes near and beyond; and the Fox and Wisconsin river improvements, making navigation free from the upper Mississippi through the lakes to the East.

Considering the vast area of country that will thereby be brought into a close connection and opened to traffic, it is a subject of great national importance, and in every manner deserving of favorable action from our Government.

In it is contained the solution of the problem of how to cheapen food at the door of the manufacturer in the East, and thereby enable him to compete, without any loss or detriment to himself or his employees, with the foreign manufacturer; and whereby an impetus will also be given to the farmer to extend the area of cultivation of the soil; his sons will not be so anxious to leave that noble and healthy calling for the more uncertain chances of city life; and it may even yet prove to be a wise policy whereby the interest of the whole people would be served to give not only a home but a bonus to every one who will cultivate the wild land that now sustains no animal life but the buffalo, and thus increase the production of the nation's wealth by taking therefrom crops of golden wheat.

The President has most explicitly remarked—

“That production increases more rapidly than the means of transportation. That the unprecedented growth in population and products of the whole country will require additional facilities and cheaper ones for the more bulky articles of commerce to reach tide-water and a market.”

The evidence of this appears generally all over the coun-

try, but the carefully prepared statistics of the Statistical Bureau of the Treasury, as also of the Bureau of Agriculture, bring the great facts more prominently before the mind; and I have therefore made some few selections from these reports, for which I am indebted to the politeness of the efficient officers of these Bureaus, E. B. Elliott, Esq., and J. R. Dodge, Esq., showing the enormous increase of the growth and production of agricultural products and manufactures, and of the amount of our exports and imports since 1830, when the Erie canal had not been open very long, up to the present time; and these I think will convince the most indifferent on the subject, that the commerce of the country demands that it should have additional outlets and greater facilities for exchange than what it has at present.

There is not any reason why there should be any jealousy or opposition to this work by reason of sectional or other prejudices.

The friends of this undertaking have none such against granting all the means necessary to keep the passes of the Mississippi open; but, on the contrary, they approved of it most heartily as a national work, that should ever be looked after carefully; neither do they object to the granting of national aid to the James River and Kanawha, and Chesapeake and Ohio canals, but recommend their speedy completion, believing that all these are undertakings by which the whole country will be benefited. But at the same time they regard the construction of the Tennessee and Georgia canal as second to none; and that all will be found of great material public benefit, and fulfill all the expectations of those who recommend these river improvements and the construction of these canals by national aid.

I have endeavored faithfully to collect all the evidence bearing upon this great project, either for or against it—but proofs against it I have found none. Firm in my own conviction, from the first day that I gave it thought, that it would be nationally beneficial, I hope that what I have here produced in support of it will satisfy the most skept-

tical as to its great utility, and that it deserves generous aid from the National Government.

I wish that I could convey all the enthusiasm which I feel myself in respect to this undertaking; but trusting that the palpable evidence of the great and urgent public need for this outlet to commerce, the benefits that will accrue to millions by its construction, the prosperity that it will create along its course, and the undeniable evidence of the benefits conferred by a somewhat similar work—the Erie canal—and the proof that in the course of one generation it will repay two-fold and more all the outlay upon its construction, will, I trust, induce the people to instruct their Representatives at the next session of Congress to grant the means to commence its construction upon a scale commensurate with its importance and the need for its speedy completion.

I have the honor to remain, most respectfully, your excellency's very obedient servant,

JOHN A. LYNCH.

WASHINGTON CITY,

904 FOURTEENTH STREET, *May* 18, 1873.

APPENDIX.

Estimated product of certain cereals in the Southern and Western States, prepared by J. R. Dodge, Esq., Statistician of the Agricultural Bureau.

PRODUCT OF WHEAT.

STATES.	1869. BUSHELS.	1870. BUSHELS.	1871. BUSHELS.	1872. BUSHELS.
Virginia.....	8,642,000	6,705,000	6,369,000	6,432,000
North Carolina.....	3,870,000	4,218,000	2,530,000	3,289,000
South Carolina.....	920,000	1,012,000	586,000	662,000
Georgia.....	2,170,000	2,387,000	1,718,000	3,109,000
Florida.....	1,300			
Alabama.....	930,000	1,041,000	832,000	1,106,000
Mississippi.....	267,000	221,000	198,000	199,000
Louisiana.....	50,000	41,000		
Texas.....	1,250,000	1,225,000	551,000	1,377,000
Arkansas.....	1,170,000	1,251,000	688,000	701,000
Tennessee.....	6,750,000	7,357,000	5,149,000	10,298,000
West Virginia.....	2,562,000	2,533,000	2,608,000	2,712,000
Kentucky.....	5,500,000	5,610,000	4,448,000	7,854,000
Ohio.....	20,400,000	19,150,000	18,575,000	18,203,000
Michigan.....	16,800,000	15,288,000	16,205,000	13,936,000
Indiana.....	20,600,000	20,200,000	19,190,000	19,381,000
Illinois.....	29,200,000	27,115,000	25,216,000	24,711,000
Wisconsin.....	24,000,000	20,485,000	18,436,000	22,307,000
Minnesota.....	19,000,000	16,022,000	12,016,000	23,200,000
Iowa.....	23,500,000	20,445,000	18,400,000	22,080,000
Missouri.....	7,500,000	6,750,000	12,825,000	7,695,000
Kansas.....	2,800,000	2,343,000	2,694,000	2,155,000
Nebraska.....	1,000,000	1,848,000	1,829,000	2,560,000
Total.....	198,882,300	183,247,000	171,063,000	193,967,000
Total in U. States...	260,146,900	235,884,700	230,722,400	249,997,100

Estimated product—continued.

PRODUCT OF CORN.

STATES.	1869. BUSHELS.	1870. BUSHELS.	1871. BUSHELS.	1872. BUSHELS.
Virginia.....	17,500,000	19,360,000	19,553,000	18,184,000
North Carolina.....	17,400,000	22,500,000	20,700,000	24,012,000
South Carolina.....	8,100,000	12,000,000	9,840,000	10,627,000
Georgia.....	27,500,000	31,000,000	20,150,000	23,777,000
Florida.....	3,100,000	2,247,000	2,022,000	1,920,000
Alabama.....	30,200,000	35,334,000	19,080,000	22,896,000
Mississippi.....	30,000,000	30,300,000	18,180,000	21,816,000
Louisiana.....	16,850,000	18,000,000	8,100,000	10,125,000
Texas.....	23,000,000	23,690,000	20,847,000	27,934,000
Arkansas.....	25,750,000	25,000,000	16,250,000	17,062,000
Tennessee.....	47,500,000	51,000,000	45,900,000	46,818,000
West Virginia.....	8,100,000	9,837,000	9,345,000	9,905,000
Kentucky.....	51,500,000	63,345,000	53,843,000	63,534,000
Ohio.....	68,250,000	87,751,000	89,506,000	99,351,000
Michigan.....	14,100,000	19,035,000	16,179,000	16,987,000
Indiana.....	73,000,000	113,150,000	79,206,000	85,541,000
Illinois.....	121,500,000	201,378,000	203,391,000	217,628,000
Wisconsin.....	9,500,000	19,995,000	21,394,000	21,180,000
Minnesota.....	5,750,000	5,823,000	8,152,000	7,988,000
Iowa.....	78,500,000	93,415,000	99,019,000	101,989,000
Missouri.....	80,500,000	94,990,000	87,390,000	105,741,000
Kansas.....	24,500,000	16,685,000	24,693,000	29,631,000
Nebraska.....	6,750,000	5,163,000	7,228,000	7,589,000
Total.....	788,850,000	1,000,998,000	899,967,000	992,535,000
Total in U. States...	874,320,000	1,094,255,000	991,898,000	1,092,719,000

Estimated product—continued.

PRODUCT OF OATS.

STATES.	1869. BUSHELS.	1870. BUSHELS.	1871. BUSHELS.	1872. BUSHELS.
Virginia.....	9,017,000	7,175,000	5,381,000	4,089,000
North Carolina.....	3,500,000	2,750,000	2,200,000	2,860,000
South Carolina.....	850,000	926,000	537,000	494,000
Georgia.....	1,200,000	1,260,000	1,512,000	1,814,000
Florida.....	23,000	116,400	116,000	104,000
Alabama.....	567,000	700,000	672,000	651,000
Mississippi.....	200,000	300,000	465,000	460,000
Louisiana.....	87,000	87,000	39,000	40,000
Texas.....	1,250,000	1,500,000	675,000	783,000
Arkansas.....	550,000	671,000	657,000	702,000
Tennessee.....	3,500,000	3,920,000	4,116,000	5,103,000
West Virginia.....	2,100,000	2,655,000	2,389,000	2,341,000
Kentucky.....	5,800,000	6,148,000	6,209,000	6,769,000
Ohio.....	27,000,000	24,500,000	24,990,000	27,489,000
Michigan.....	8,700,000	9,831,000	9,634,000	9,248,000
Indiana.....	12,413,000	11,668,000	11,784,000	13,080,000
Illinois.....	35,726,000	38,502,000	38,502,000	43,122,000
Wisconsin.....	22,500,000	14,327,000	15,759,000	16,546,000
Minnesota.....	12,500,000	8,959,000	7,883,000	9,459,000
Iowa.....	19,000,000	16,340,000	19,934,000	19,934,000
Missouri.....	6,500,000	5,525,000	13,812,000	16,850,000
Kansas.....	1,590,000	3,688,000	4,056,000	6,084,000
Nebraska.....	1,250,000	1,226,000	1,226,000	1,667,000
Total.....	175,733,000	162,774,000	162,548,000	189,689,000
Total in U. States...	288,334,000	247,277,400	255,743,000	271,747,000

Tabular extracts from the Statistical Reports of the United States Treasury and the Agricultural Bureau, for which I am indebted to the politeness of those efficient officers E. B. Elliott, Esq., and J. R. Dodge, Esq., of those Departments.

Estimated production of the corn and grain crop of the United States in 1869.

Wheat.	Barley.	Oats.	Rye, peas, beans.	Buckwheat.	Corn.
252,569,806	27,817,670	279,935,922	21,871,748	16,923,398	848,854,369

The tonnage of western rivers in 1872.

Ohio river and its tributaries..... \$1,787,333 83
The Upper Mississippi, (above Cairo,) Missouri, and tributaries, 356,277 00

Table showing the quantity of grain imported into Great Britain from the United States and Russia during the eleven years from 1858 to 1868.

Year.	United States. Bushels.	Russia. Bushels.	Year.	United States. Bushels.	Russia. Bushels.
1858	4,580,960	4,716,336	1864	14,035,563	9,096,843
1859	284,384	6,281,472	1865	2,093,536	14,389,264
1860	11,550,816	10,023,632	1866	1,129,312	15,888,352
1861	17,718,912	8,023,104	1867	7,445,344	9,350,154
1862	30,693,512	10,224,032	1868	10,511,376	17,873,058
1863	15,474,480	8,061,456			

Table showing the value of exports and imports from and to the United States for the ten years ending September 30, 1830, and also for the ten years ending June 30, 1870.

Value of merchandise exported during the first decade, 1820 to 1830.....	\$532,212,385
Annual average, \$53,221,239.	
Coin and bullion imported during same period.....	1,497,857
Annual average, \$149,786.	
Estimated average of the population for the period, 11,257,076.	
Total.....	<u>\$533,710,242</u>
Value of merchandise exported during the decade ending June 30, 1870.....	\$2,376,053,356
Annual average, \$237,605,336.	
Coin and bullion imported during same period.....	1,497,857
Annual average, \$149,786.	
Total.....	<u>\$2,377,551,213</u>
Value of merchandise exported during the year 1870-'71.....	\$428,640,914
Coin and bullion imported during same period.....	7,231,395
Estimated population for the period, 39,712,000.	
Total.....	<u>\$435,872,309</u>
Value of merchandise imported during the first decade, 1820 to 1830.....	\$567,491,739
Annual average, \$56,749,174.	
Coin and bullion exported during the same period.....	3,892,533
Annual average, \$389,253.	
Total.....	<u>\$571,384,272</u>
Value of merchandise imported during the decade ending June 30, 1870.....	\$3,164,877,997
Annual average, \$316,487,800.	
Coin and bullion exported during the period.....	584,095,082
Annual average, \$237,605,336.	
Total.....	<u>\$3,748,973,079</u>
Value of merchandise imported during the year 1870-'71.....	\$505,802,480
Coin and bullion exported during the period.....	84,403,359
Total.....	<u>\$590,205,839</u>

Comparative summary statement, from monthly returns of collectors of customs, of commodities the growth, produce, and manufacture of the United States, exported from the United States during the eight months ending August 31, 1871, and August 31, 1872.

Total exported for that period in 1871.....	\$389,242,497
Total exported for that period in 1872.....	391,920,267
In 1872, American vessels, \$113,326,622.	
In 1872, foreign vessels, \$276,075,908.	
Amount of foreign commodities imported during same period in 1871.....	408,503,331
Amount of foreign commodities imported during same period in 1872.....	479,924,793
In American vessels in 1872, \$132,015,952.	
In foreign vessels in 1872, \$334,167,070.	

Tennessee and Georgia iron production.

Two tons of iron ore near the surface, at \$1 50 per ton.....	\$3 00
Two tons of coal to make a ton of iron, at \$2 50 per ton.....	5 00
One ton of limestone.....	1 00
Labor to make one ton of iron.....	7 00
Cost of iron per ton.....	<u>\$16 00</u>

Ship freights on wheat.

Freight—New York to Liverpool, 50 cents per bushel.
 Baltic to Liverpool, 35 cents per bushel.
 Black sea to Liverpool, 45 cents per bushel.

The report of the State Engineer of New York for 1868 shows that over the route from Lake Erie to New York, a distance of about one third as great as from the Mississippi river to the Atlantic ocean, the charges for transportation for three years average three and three fourth times as much as the whole charge from the Mississippi river to the Atlantic ocean, and about twice as much as the whole charge from the Mississippi river to Liverpool.

Freight by sail-vessels—Chicago to Buffalo.

April, 1870: Wheat, 6 to 8 cents.	October, 1870: Wheat, 4½ to 5½ cents.
Corn, 6 to 7½ cents.	Corn, 4 to 5 cents.
Oats, 4½ to 5½ cents.	Oats, 3½ to 3¾ cents.

Lake, steam, and rail-freights to New York.

Flour, 75 cents. Grain, per 100 lbs., 35 @ 37½ cents.
 Provisions, 35 @ 37½ cents.

All rail to New York.

Flour, \$1.30.

Bulk meats, per 100 lbs., 75 cents.

Grain, per 100 lbs., 70 cents.

Dressed hogs, per 100 lbs., \$1.10.

Population of the several States bordering on and immediately interested in the construction of this canal:

Alabama.....	996,992	Minnesota.....	439,706
Arkansas.....	484,471	Mississippi.....	827,922
Florida.....	187,000	Missouri.....	1,721,295
Georgia.....	1,184,653	Nebraska.....	122,993
Illinois.....	2,761,291	North Carolina.....	1,000,000
Indiana.....	1,680,637	Ohio.....	2,665,000
Iowa.....	1,010,000	South Carolina.....	300,000
Kansas.....	364,409	Tennessee.....	1,258,520
Kentucky.....	1,900,911		

